

ABSTRACT OF THE DISCLOSURE

This invention presents oligonucleotide derivatives comprising a complementary purine part carrying one or more 8-aminopurines such as 8-aminoadenine, 8-aminoguanine and 8-aminohypoxanthine connected with a linker to an oligonucleotide carrying either GT or GA sequences. These oligonucleotide derivatives bind polypyrimidine sequences complementary (in the antiparallel sense) to the purine part by formation of purine-purine-pyrimidine triple helices. The oligonucleotides carrying 8-aminoguanines described in this invention have better binding properties than unmodified oligonucleotides. This enhancement in stability, coupled with the lack of an acidic pH requirement, makes the oligonucleotides carrying 8-aminopurines effective in applications involving oligonucleotide targeting of single stranded RNA in vitro and in vivo, as well as applications requiring triple helix formation.